# Emily Fischer

List of Publications by Year
in descending order



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|---|---|---|---|
| 100 papers | 3,998 citations | 109137 35 h-index | 143772 57 g-index |
| 119 all docs | 119 docs citations | 119 times ranked | 4214 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Atmospheric peroxyacetyl nitrate (PAN): a global budget and source attribution. Atmospheric Chemistry and Physics, 2014, 14, 2679-2698. | 1.9 | 259 |
| 2 | Future Fire Impacts on Smoke Concentrations, Visibility, and Health in the Contiguous United States. GeoHealth, 2018, 2, 229-247. | 1.9 | 176 |
| 3 | Contribution of Wildland-Fire Smoke to US PM<sub>2.5</sub> and Its Influence on Recent Trends. Environmental Science & Technology, 2019, 53, 1797-1804. | 4.6 | 139 |
| 4 | Unexpected slowdown of US pollutant emission reduction in the past decade. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5099-5104. | 3.3 | 137 |
| 5 | A major regional air pollution event in the northeastern United States caused by extensive forest fires in Quebec, Canada. Journal of Geophysical Research, 2004, 109, . | 3.3 | 117 |
| 6 | Comparison of wildfire smoke estimation methods and associations with cardiopulmonaryâ€related hospital admissions. GeoHealth, 2017, 1, 122-136. | 1.9 | 113 |
| 7 | Impact of Wildfire Smoke on Adverse Pregnancy Outcomes in Colorado, 2007â€“2015. International Journal of Environmental Research and Public Health, 2019, 16, 3720. | 1.2 | 112 |
| 8 | Quantification of organic aerosol and brown carbon evolution in fresh wildfire plumes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29469-29477. | 3.3 | 100 |
| 9 | Investigating the links between ozone and organic aerosol chemistry in a biomass burning plume from a prescribed fire in California chaparral. Atmospheric Chemistry and Physics, 2015, 15, 6667-6688. | 1.9 | 96 |
| 10 | Inorganic chlorine and bromine in coastal New England air during summer. Journal of Geophysical Research, 2007, 112, . | 3.3 | 93 |
| 11 | The role of the ocean in the global atmospheric budget of acetone. Geophysical Research Letters, 2012, 39, . | 1.5 | 90 |
| 12 | The effect of pollution on crime: Evidence from data on particulate matter and ozone. Journal of Environmental Economics and Management, 2019, 98, 102267. | 2.1 | 88 |
| 13 | Influence of oil and gas emissions on summertime ozone in the Colorado Northern Front Range. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8712-8729. | 1.2 | 86 |
| 14 | Evaluating ethane and methane emissions associated with the development of oil and natural gas extraction in North America. Environmental Research Letters, 2016, 11, 044010. | 2.2 | 82 |
| 15 | Source characterization of volatile organic compounds in the Colorado Northern Front Range Metropolitan Area during spring and summer 2015. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3595-3613. | 1.2 | 81 |
| 16 | Promoting professional identity, motivation, and persistence: Benefits of an informal mentoring program for female undergraduate students. PLoS ONE, 2017, 12, e0187531. | 1.1 | 79 |
| 17 | Spatial and temporal estimates of population exposure to wildfire smoke during the Washington state 2012 wildfire season using blended model, satellite, and in situ data. GeoHealth, 2017, 1, 106-121. | 1.9 | 77 |
| 18 | Connecting smoke plumes to sources using Hazard Mapping System (HMS) smoke and fire location data over North America. Atmospheric Chemistry and Physics, 2018, 18, 1745-1761. | 1.9 | 77 |

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|---|---|---|---|
| 19 | Smoke in the City: How Often and Where Does Smoke Impact Summertime Ozone in the United States?. Environmental Science & Technology, 2016, 50, 1288-1294. | 4.6 | 71 |
| 20 | Hazardous Air Pollutants in Fresh and Aged Western US Wildfire Smoke and Implications for Long-Term Exposure. Environmental Science & Technology, 2020, 54, 11838-11847. | 4.6 | 69 |
| 21 | Latitudinal variation in the multiphase chemical processing of inorganic halogens and related species over the eastern North and South Atlantic Oceans. Atmospheric Chemistry and Physics, 2009, 9, 7361-7385. | 1.9 | 68 |
| 22 | Free tropospheric peroxyacetyl nitrate (PAN) and ozone at Mount Bachelor: potential causes of variability and timescale for trend detection. Atmospheric Chemistry and Physics, 2011, 11, 5641-5654. | 1.9 | 64 |
| 23 | Study of chemical composition of precipitation at an alpine site and a rural site in the Urumqi River Valley, Eastern Tien Shan, China. Atmospheric Environment, 2008, 42, 8934-8942. | 1.9 | 62 |
| 24 | A decade of dust: Asian dust and springtime aerosol load in the U.S. Pacific Northwest. Geophysical Research Letters, 2009, 36, . | 1.5 | 58 |
| 25 | Ammonia sources, transport, transformation, and deposition in coastal New England during summer. Journal of Geophysical Research, 2007, 112, . | 3.3 | 56 |
| 26 | Estimated Mortality and Morbidity Attributable to Smoke Plumes in the United States: Not Just a Western US Problem. GeoHealth, 2021, 5, e2021GH000457. | 1.9 | 55 |
| 27 | Outperforming yet undervalued: Undergraduate women in STEM. PLoS ONE, 2020, 15, e0234685. | 1.1 | 54 |
| 28 | Emissions of Trace Organic Gases From Western U.S. Wildfires Based on WEâ€CAN Aircraft Measurements. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033838. | 1.2 | 54 |
| 29 | HONO Emissions from Western U.S. Wildfires Provide Dominant Radical Source in Fresh Wildfire Smoke. Environmental Science & Technology, 2020, 54, 5954-5963. | 4.6 | 51 |
| 30 | Meteorological controls on observed peroxyacetyl nitrate at Mount Bachelor during the spring of 2008. Journal of Geophysical Research, 2010, 115, . | 3.3 | 50 |
| 31 | Changes in ozone and precursors during two aged wildfire smoke events in the Colorado Front Range in summer 2015. Atmospheric Chemistry and Physics, 2017, 17, 10691-10707. | 1.9 | 49 |
| 32 | Estimates of Cl atom concentrations and hydrocarbon kinetic reactivity in surface air at Appledore Island, Maine (USA), during International Consortium for Atmospheric Research on Transport and Transformation/Chemistry of Halogens at the Isles of Shoals. Journal of Geophysical Research, 2007, 112, . | 3.3 | 43 |
| 33 | Revisiting global fossil fuel and biofuel emissions of ethane. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2493-2512. | 1.2 | 43 |
| 34 | Nitrogen oxides in the boundary layer and free troposphere at the Mt. Bachelor Observatory. Atmospheric Chemistry and Physics, 2010, 10, 6043-6062. | 1.9 | 42 |
| 35 | Emissions of Reactive Nitrogen From Western U.S. Wildfires During Summer 2018. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032657. | 1.2 | 41 |
| 36 | Environmental Conditions, Ignition Type, and Air Quality Impacts of Wildfires in the Southeastern and Western United States. Earth's Future, 2018, 6, 1442-1456. | 2.4 | 38 |

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|---|---|---|---|
| 37 | Differential Cardiopulmonary Health Impacts of Local and Longâ€Range Transport of Wildfire Smoke. GeoHealth, 2021, 5, e2020GH000330. | 1.9 | 38 |
| 38 | Development and implementation of a new biomass burning emissions injection height scheme (BBEIH) Tj ETQq0 0 0 rgBT /Overlock 10 | 1.3 | 37 |
| 39 | The association between wildfire smoke exposure and asthma-specific medical care utilization in Oregon during the 2013 wildfire season. Journal of Exposure Science and Environmental Epidemiology, 2020, 30, 618-628. | 1.8 | 37 |
| 40 | Daytime Oxidized Reactive Nitrogen Partitioning in Western U.S. Wildfire Smoke Plumes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033484. | 1.2 | 36 |
| 41 | Optical properties of aged Asian aerosols observed over the U.S. Pacific Northwest. Journal of Geophysical Research, 2010, 115, . | 3.3 | 34 |
| 42 | The Associations Between Clinical Respiratory Outcomes and Ambient Wildfire Smoke Exposure Among Pediatric Asthma Patients at National Jewish Health, 2012â€“2015. GeoHealth, 2019, 3, 146-159. | 1.9 | 31 |
| 43 | Volatile organic compounds and ozone in Rocky Mountain National Park during FRAPPÃ‰. Atmospheric Chemistry and Physics, 2019, 19, 499-521. | 1.9 | 31 |
| 44 | Past Variance and Future Projections of the Environmental Conditions Driving Western U.S. Summertime Wildfire Burn Area. Earth's Future, 2021, 9, e2020EF001645. | 2.4 | 30 |
| 45 | Nanoparticle growth following photochemical Î± - and Î² -pinene oxidation at Appledore Island during International Consortium for Research on Transport and Transformation/Chemistry of Halogens at the Isles of Shoals 2004. Journal of Geophysical Research, 2007, 112, . | 3.3 | 29 |
| 46 | North American acetone sources determined from tall tower measurements and inverse modeling. Atmospheric Chemistry and Physics, 2013, 13, 3379-3392. | 1.9 | 29 |
| 47 | The relationship between monthly air pollution and violent crime across the United States. Journal of Environmental Economics and Policy, 2020, 9, 188-205. | 1.5 | 28 |
| 48 | Tall Tower Vertical Profiles and Diurnal Trends of Ammonia in the Colorado Front Range. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,468. | 1.2 | 26 |
| 49 | Summertime ozone at Mount Washington: Meteorological controls at the highest peak in the northeast. Journal of Geophysical Research, 2004, 109, . | 3.3 | 24 |
| 50 | The 1935â€“2003 Air Temperature Record from the Summit of Mount Washington, New Hampshire. Journal of Climate, 2005, 18, 4445-4453. | 1.2 | 24 |
| 51 | Ozone export from East Asia: The role of PAN. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6555-6563. | 1.2 | 24 |
| 52 | Observations of Ice Nucleating Particles in the Free Troposphere From Western US Wildfires. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033752. | 1.2 | 24 |
| 53 | Tropospheric sources and sinks of gas-phase acids in the Colorado Front Range. Atmospheric Chemistry and Physics, 2018, 18, 12315-12327. | 1.9 | 23 |
| 54 | Evaluation of ambient ammonia measurements from a research aircraft using a closed-path QC-TILDAS operated with active continuous passivation. Atmospheric Measurement Techniques, 2019, 12, 3717-3742. | 1.2 | 22 |

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|---|---|---|---|
| 55 | Associations Between Wildfireâ€Related PM<sub>2.5</sub> and Intensive Care Unit Admissions in the United States, 2006â€“2015. GeoHealth, 2021, 5, e2021GH000385. | 1.9 | 20 |
| 56 | Optical and chemical properties of aerosols transported to Mount Bachelor during spring 2010. Journal of Geophysical Research, 2011, 116, . | 3.3 | 19 |
| 57 | Satellite observations of peroxyacetyl nitrate from the Aura Tropospheric Emission Spectrometer. Atmospheric Measurement Techniques, 2014, 7, 3737-3749. | 1.2 | 18 |
| 58 | Wildfire Smoke Is Associated With an Increased Risk of Cardiorespiratory Emergency Department Visits in Alaska. GeoHealth, 2021, 5, e2020GH000349. | 1.9 | 18 |
| 59 | Aerosol major ion record at Mount Washington. Journal of Geophysical Research, 2007, 112, . | 3.3 | 17 |
| 60 | Aerosolâ€nutrientâ€induced picoplankton growth in Lake Tahoe. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1054-1067. | 1.3 | 17 |
| 61 | PAN in the eastern Pacific free troposphere: A satellite view of the sources, seasonality, interannual variability, and timeline for trend detection. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3614-3629. | 1.2 | 17 |
| 62 | Global Atmospheric Budget of Acetone: Airâ€Sea Exchange and the Contribution to Hydroxyl Radicals. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032553. | 1.2 | 17 |
| 63 | Inspiration, inoculation, and introductions are all critical to successful mentorship for undergraduate women pursuing geoscience careers. Communications Earth & Environment, 2020, 1, . | 2.6 | 17 |
| 64 | Observations and Modeling of NO<sub>x</sub> Photochemistry and Fate in Fresh Wildfire Plumes. ACS Earth and Space Chemistry, 2021, 5, 2652-2667. | 1.2 | 17 |
| 65 | A sensitivity analysis of key natural factors in the modeled global acetone budget. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2043-2058. | 1.2 | 17 |
| 66 | Impact of Front Range sources on reactive nitrogen concentrations and deposition in Rocky Mountain National Park. PeerJ, 2018, 6, e4759. | 0.9 | 17 |
| 67 | TES observations of the interannual variability of PAN over Northern Eurasia and the relationship to springtime fires. Geophysical Research Letters, 2015, 42, 7230-7237. | 1.5 | 15 |
| 68 | Observations of Acyl Peroxy Nitrates During the Front Range Air Pollution and Photochemistry Ã‰xperiment (FRAPPÃ‰). Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,416. | 1.2 | 14 |
| 69 | Is pretenure interdisciplinary research a career risk?. Eos, 2012, 93, 311-312. | 0.1 | 13 |
| 70 | Acyl Peroxy Nitrates Link Oil and Natural Gas Emissions to High Ozone Abundances in the Colorado Front Range During Summer 2015. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2336-2350. | 1.2 | 13 |
| 71 | Biomass Burning Smoke and Its Influence on Clouds Over the Western U. S.. Geophysical Research Letters, 2021, 48, e2021GL094224. | 1.5 | 13 |
| 72 | Atmospheric Implications of Large C<sub>2</sub>â€C<sub>5</sub> Alkane Emissions From the U.S. Oil and Gas Industry. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1148-1169. | 1.2 | 12 |

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|---|---|---|---|
| 73 | Empirical Insights Into the Fate of Ammonia in Western U.S. Wildfire Smoke Plumes. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033730. | 1.2 | 12 |
| 74 | Regional NO3â^'events in the northeastern United States related to seasonal climate anomalies. Geophysical Research Letters, 2005, 32, . | 1.5 | 11 |
| 75 | Atmospheric Photolysis of Methyl Ethyl, Diethyl, and Propyl Ethyl Ketones: Temperatureâ€Dependent UV Absorption Cross Sections. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5906-5918. | 1.2 | 11 |
| 76 | Could the exception become the rule? â€œUncontrollableâ€•air pollution events in the U.S. due to wildland fires. Environmental Research Letters, 0, , . | 2.2 | 10 |
| 77 | Spatial variability in tropospheric peroxyacetyl nitrate in the tropics from infrared satellite observations in 2005 and 2006. Atmospheric Chemistry and Physics, 2017, 17, 6341-6351. | 1.9 | 9 |
| 78 | Using TES retrievals to investigate PAN in North American biomass burning plumes. Atmospheric Chemistry and Physics, 2018, 18, 5639-5653. | 1.9 | 9 |
| 79 | Seasonality and Source Apportionment of Nonmethane Volatile Organic Compounds at Boulder Reservoir, Colorado, Between 2017 and 2019. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034234. | 1.2 | 9 |
| 80 | Exposure to Particulate Matter and Estimation of Volatile Organic Compounds across Wildland Firefighter Job Tasks. Environmental Science & Technology, 2021, 55, 11795-11804. | 4.6 | 9 |
| 81 | Evolution of Acyl Peroxynitrates (PANs) in Wildfire Smoke Plumes Detected by the Crossâ€Track Infrared Sounder (CrIS) Over the Western U.S. During Summer 2018. Geophysical Research Letters, 2021, 48, . | 1.5 | 9 |
| 82 | Estimating the Spread in Future Fine Dust Concentrations in the Southwest United States. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031735. | 1.2 | 8 |
| 83 | Evidence for an Oceanic Source of Methyl Ethyl Ketone to the Atmosphere. Geophysical Research Letters, 2020, 47, e2019GL086045. | 1.5 | 8 |
| 84 | A national burden assessment of estimated pediatric asthma emergency department visits that may be attributed to elevated ozone levels associated with the presence of smoke. Environmental Monitoring and Assessment, 2019, 191, 269. | 1.3 | 7 |
| 85 | First retrievals of peroxyacetyl nitrate (PAN) from ground-based FTIR solar spectra recorded at remote sites, comparison with model and satellite data. Elementa, 2021, 9, . | 1.1 | 7 |
| 86 | Weekendâ€Weekday Implications and the Impact of Wildfire Smoke on Ozone and Its Precursors at Boulder Reservoir, Colorado Between 2017 and 2019. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035221. | 1.2 | 7 |
| 87 | Seasonality, sources and sinks of C1â€“C5 alkyl nitrates in the Colorado Front Range. Elementa, 2018, 6, . | 1.1 | 7 |
| 88 | Cows as canaries: The effects of ambient air pollution exposure on milk production and somatic cell count in dairy cows. Environmental Research, 2021, , 112197. | 3.7 | 7 |
| 89 | Spatially Resolved Photochemistry Impacts Emissions Estimates in Fresh Wildfire Plumes. Geophysical Research Letters, 2021, 48, e2021GL095443. | 1.5 | 7 |
| 90 | The CU Airborne Solar Occultation Flux Instrument: Performance Evaluation during BB-FLUX. ACS Earth and Space Chemistry, 2022, 6, 582-596. | 1.2 | 7 |

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| 91 | Enhancements in Ammonia and Methane from Agricultural Sources in the Northeastern Colorado Front Range Using Observations from a Small Research Aircraft. Environmental Science & Technology, 2022, 56, 2236-2247. | 4.6 | 7 |
| 92 | Welcoming Women into the Geosciences. Eos, 2018, 99, . | 0.1 | 5 |
| 93 | Wildfire-driven changes in the abundance of gas-phase pollutants in the city of Boise, ID during summer 2018. Atmospheric Pollution Research, 2022, 13, 101269. | 1.8 | 5 |
| 94 | Seeking congruity for communal and agentic goals: a longitudinal examination of U.S. college womenâ€™s persistence in STEM. Social Psychology of Education, 2022, 25, 649-674. | 1.2 | 4 |
| 95 | Peroxy acetyl nitrate (PAN) measurements at northern midlatitude mountain sites in April: a constraint on continental sourceâ€“receptor relationships. Atmospheric Chemistry and Physics, 2018, 18, 15345-15361. | 1.9 | 3 |
| 96 | PM<sub>2.5</sub> in Carlsbad Caverns National Park: Composition, sources, and visibility impacts. Journal of the Air and Waste Management Association, 2022, 72, 1201-1218. | 0.9 | 3 |
| 97 | Satellite measurements of peroxyacetyl nitrate from the Cross-Track Infrared Sounder: comparison with ATom aircraft measurements. Atmospheric Measurement Techniques, 2022, 15, 3497-3511. | 1.2 | 3 |
| 98 | Impacts of Emissions of C<sub>2</sub>â€“<sub>5</sub> Alkanes From the U.S. Oil and Gas Sector on Ozone and Other Secondary Species. Journal of Geophysical Research D: Atmospheres, 2021, 126, . | 1.2 | 1 |
| 99 | Wildfire-related PMâ„‚â‚… and Intensive Care Unit Admissions and Bed Utilization in the United States, 2006-2015. ISEE Conference Abstracts, 2021, 2021, . | 0.0 | 1 |
| 100 | Women in Geoscience: An interview with Emily Fischer. Cogent Geoscience, 2018, 4, 1432284. | 0.6 | 0 |